

Appl. No. 09/920,450
Amdt. dated October 13, 2004
Reply to Office action of July 13, 2004

In the Claims:

Claims 3-6 are amended herein. New claims 10-14 are added.
Claims 1, 2 and 7 are canceled. The remaining claims are not
amended in this response.

1. (canceled)

2. (canceled)

3. (currently amended) A defect inspection apparatus for a
phase shift mask according to claim 2 10, wherein said at least
two different phase shifter pattern fabricated regions are phase
shifter pattern fabricated regions of chips different from each
other.

4. (currently amended) A defect inspection apparatus for a
phase shift mask according to claim 2 10 or 3, wherein the
reflection images of said at least two different phase shifter
pattern fabricated regions are captured through respective
magnifying optical systems.

5. (currently amended) A defect inspection apparatus for a
phase shift mask according to claim 2 10, wherein said at least
two different phase shifter pattern fabricated regions are phase
shifter pattern fabricated regions in an identical chip pattern.

Appl. No. 09/920,450
Amdt. dated October 13, 2004
Reply to Office action of July 13, 2004

6. (currently amended) A defect inspection apparatus for a phase shift mask according to claim ~~2~~ 10 or 5, wherein the reflection images of said at least two different phase shifter pattern fabricated regions are captured through an identical magnifying optical system.

7. (canceled)

8. (previously presented) A defect inspection apparatus for a phase shift mask according to claim 4, wherein said reflection images obtained by reflected light are dark field images obtained by dark field illumination or bright field images obtained by bright field illumination.

9. (previously presented) A defect inspection apparatus for a phase shift mask according to claim 6, wherein said reflection images obtained by reflected light are dark field images obtained by dark field illumination or bright field images obtained by bright field illumination.

10. (new) A defect inspection apparatus for a phase shift mask having a phase shifter pattern provided on a mask transparent substrate, comprising a lens means for directing light toward at least two regions of the phase shift mask from a mask transparent substrate side of said phase shift mask which is opposite to a side thereof where said phase shifter pattern has been formed, at least two light receiving elements for receiving

Appl. No. 09/920,450
Amdt. dated October 13, 2004
Reply to Office action of July 13, 2004

light reflected from the at least two regions of the phase shift mask, a difference judging circuit for judging a difference between the light reflected from one of the at least two regions and an other of the at least two regions.

11. (new) A defect inspection apparatus according to claim 10 further comprising a stage upon which the phase mask moves, a coordinate positioning measuring circuit for measuring the position of the stage when light is received by said light receiving elements, an inspection data storing circuit for receiving data from said difference judging circuit and for receiving data from said coordinate positioning measuring circuit for determining where a difference has been judged.

12. (new) A defect inspection apparatus according to claim 10 wherein the reflected light is dark field images obtained by dark field illumination or bright field images obtained by bright field illumination.

13. (new) A method of inspecting a phase shift mask, comprising the steps of:

positioning a single piece of phase shift mask below two spaced apart optical retrieval means;

reflecting light from a light source toward two regions on the phase shift mask;

Appl. No. 09/920,450
Amdt. dated October 13, 2004
Reply to Office action of July 13, 2004

receiving light reflected from the two regions by receiving elements;

comparing electrical signals from the receiving elements;
and

judging if any difference detected in said comparing step is greater than a threshold value.

14. (new) A method of inspecting a phase shift mask according to claim 13, further comprising the steps of:

measuring coordinate position data regarding the position of the phase shift mask regions wherein a difference in electrical signals was detected;

moving the phase shift mask repeatedly and repeating the steps of reflecting, receiving, comparing, judging and measuring for each movement;

determining which of the regions wherein a difference was judged greater than the threshold value contains a defect.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.